

CLAIMS:

1. A liquid dispensing device for use in the flush cistern of a water closet, the device comprising:

- a liquid formulation,
- a reservoir for the liquid formulation,
- means for maintaining the level of the liquid formulation in the reservoir at a predetermined level,
- an outlet through which the liquid formulation is dispensed, and

- means for dispensing a quantity of the liquid formulation via the outlet,

- wherein the means for dispensing a quantity of the liquid formulation via the outlet comprises means for temporarily increasing the level of the liquid formulation in the reservoir so that the liquid formulation enters the outlet.

2. A liquid dispensing device as claimed in claim 1, wherein the means for dispensing a quantity of liquid formulation is actuated, in use, by the change in water level of the flush cistern when it is actuated.

3. A liquid dispensing device as claimed in claim 1 or 2, wherein the means for temporarily increasing the level of the liquid formulation in the reservoir comprises a displacement body which is movable between a first position and a second position, and

- means is provided for moving the displacement body from the first position to the second position to dispense a quantity of the liquid formulation from the reservoir via the outlet.

4. A liquid dispensing device as claimed in claim 3, wherein the displacement body is a magnet.

5. A liquid dispensing device as claimed in claim 4, wherein the means for moving the displacement body comprises a movable member which includes another magnet.

6. A liquid dispensing device as claimed in claim 3 wherein the displacement body is a core of a solenoid, an electrical coil surrounds the core, and the coil is energised to move the displacement body in at least one direction.

7. A liquid dispensing device as claimed in any one of claims 1 to 6, wherein
a piston housing is disposed within the reservoir,
and the displacement body is housed within the piston housing to form a piston.

8. A liquid dispensing device as claimed in claim 7, wherein the fit of the piston in the housing allows the piston to pump liquid from the housing when it is moved from the first position to the second position, and liquid can seep past the piston in the housing when it is stationary.

9. A toilet cleansing device having a strap for suspending said toilet cleansing device inside the lidded flush cistern of a water closet, the toilet cleansing device comprising:

a device for dispensing, in use, a substance into the water in the cistern,

the strap having a first end and a second end,
attaching means on the first end of the strap for
securing the first end outside of the cistern,

the second end of the strap being attached to the
toilet cleansing device,

wherein the strap is sufficiently thin so that in use
it does not substantially raise the lid of the flush
cistern.

10. A device as claimed in claim 9, wherein the width of
the strap is between 5mm and 40mm.

11. A device as claimed in claim 10, wherein the width of
the strap is between 10mm and 20mm.

12. A strap as claimed in claim 9, 10 or 11, wherein the
attaching means comprises a suction pad or an adhesive.

13. A dispensing device for dispensing liquid into a
toilet cistern, the device comprising a piston housing, a
piston movable in the housing to pump liquid from the
housing, a float positioned, in use, to be raised and
lowered by the water in the cistern as the water level
changes, the float being operatively coupled to the piston
to cause movement of the piston to pump liquid from the
housing.

14. A dispensing device as claimed in claim 13, in which
the piston pumps liquid from the housing as the float
falls.

15. A dispensing device as claimed in claim 13, in which the piston pumps liquid from the housing as the float rises.

16. A dispensing device as claimed in claim 13, 14 or 15, comprising a reservoir for the liquid and in which piston housing is replenished from the reservoir.

17. A dispensing device as claimed in claim 16, in which the reservoir is fed from a supply of the liquid and a constant head device is provided for maintaining a substantially constant level of liquid in the reservoir.

18. A dispensing device as claimed in claim 16 or 17, in which the reservoir feeds liquid into the piston housing through a space between the piston and the housing wall.

19. A dispensing device as claimed in any one of claims 13 to 18, in which the float is magnetically coupled to the piston.

20. A dispensing device as claimed in any one of claims 13 to 18, in which the float is mechanically coupled to the piston.

21. A dispensing device comprising a strap for suspending the device in a toilet cistern, a container of liquid, a body housing a piston in a piston chamber, the piston chamber having an outlet for liquid to be pumped from the device by movement of the piston, a conduit for supplying liquid from the container to the piston chamber, and a float which is operatively coupled to the piston to move

the piston as the float moves, the float being moved in use by the rise and fall of water in the cistern.

22. A dispensing device comprising a strap for suspending the device in a toilet cistern, a container of liquid, a body housing a piston in a piston chamber, the piston chamber having an outlet for liquid to be pumped from the device by movement of the piston, a conduit for supplying liquid from the container to the piston chamber, wherein the piston is electrically operated.

23. A dispensing device as claimed in claim 22, wherein the piston is actuated by a solenoid.

24. A dispensing device as acclaimed in claim 23, wherein the piston is the armature of the solenoid.